NC/QC/YD/2020-21/W2-SS-C1 Date: 10-10-2020

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	**159 min**	Shall not be less than 30 min
2	Final setting time	**262 min**	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	**1.96 %**	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	**2.01mm**	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results)	**28.94 N/Sq mm**	Shall not be less than 27 N/Sqmm

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : **From Sri Ram Sahana Appartment LHS**

A.E.E

AE-02

NEWZEN CONSULTANT * Bangalore *

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

NC/QC/YD/2020-21/W2-SS-PCC1 Date: 10-10-2020

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.
{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
	40 mm Sample	Single size	Graded
40mm	100.00	85-100	90 – 100
20mm	64.15	0 -20	30- 70
10mm	32.70	0 -5	10- 35
4.75mm	4.05	------	0- 5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	96.70	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	81.25	60-95	75-100	85-100	
01.18	74.05	30-70	55-90	75-100	
600.mic	48.45	15-34	35-59	60-79	
300.mic	23.15	5-20	8-30	12-40	
150.mic	7.80	0-10	0-10	0-10	

AE-2

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : **From From Sri Ram Sahana Appartment LHS**

A.E.E

AE-02

NEWZEN CONSULTANT * Bangalore *

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

NC/QC/YD/2020-21/W2-SS-C2

Date: 13-10-2020

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	159 min	Shall not be less than 30 min
2	Final setting time	262 min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	1.96 %	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	2.01mm	Shall not be more than 10 mm
5	Compressive strength b) 3 days (average of three results)	28.94 N/Sq mm	Shall not be less than 27 N/Sqmm

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : **Cross rd-1RHS**

A.E.E

AE-02

NEWZEN CONSULTANT * Bangalore *

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

NC/QC/YD/2020-21/W2-SS-PCC2

Date: 13-10-2020

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.
{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
	40 mm Sample	Single size	Graded
40mm	100.00	85-100	90 – 100
20mm	64.15	0 -20	30- 70
10mm	32.70	0 -5	10- 35
4.75mm	4.05	------	0- 5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	96.70	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	81.25	60-95	75-100	85-100	
01.18	74.05	30-70	55-90	75-100	
600.mic	48.45	15-34	35-59	60-79	
300.mic	23.15	5-20	8-30	12-40	
150.mic	7.80	0-10	0-10	0-10	

AE-2
A.E.E

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : **Cross rd-1RHS**

AE-02

NEWZEN CONSULTANT * Bangalore * NEWZEN CONSULTANT

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

NC/QC/YD/2020-21/W2-SS-CB4 **Date: 06-11-2020**

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	30-10-20	06-11-20	07	22500	365	16.22	16.30
	002	"	"	"	"	360	16.00	
	003	"	"	"	"	375	16.67	

AE-2

The result of the materials tested meets the standards and hence can be used for the work.

A.E.E Sample Collected Site : **From Sri Ram Sahana Appartment LHS**

AE-02

NEWZEN CONSULTANT * K.R * NEWZEN * Bangalore

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

NC/QC/YD/2020-21/W2-SS-3A Date: 25-11-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).
{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	28-10-20	25-11-20	28	22500	505	22.44	**22.81**
	002	"	"	"	"	520	23.11	
	003	"	"	"	"	515	22.89	

AE-2

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : **3Rd Cross Rd RHS**

A.E.E

AE-02

NEWZEN CONSULTANT Bangalore

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

NC/QC/YD/2020-21/W2-SS-4A Date: 27-11-2020

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).
{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	30-10-20	27-11-20	28	22500	515	22.89	**22.59**
	002	"	"	"	"	500	22.22	
	003	"	"	"	"	510	22.67	

AE-2 The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : **1st Cross Rd RHS**

A.E.E

AE-02

NEWZEN CONSULTANT Bangalore

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

NC/QC/YD/2020-21/W2-SS-K2 Date: 09-12-2020

TEST REPORT

Sub: Testing of Pre-cast Material-Kerb Stones.
{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

1. PHYSICAL TESTS ON KERB STONES :

Sl No.	Identification	Flexural strength, fcr in N/sqmm	Characteristic Compressive Strength, fck in N/sqmm	Avg. Characteristic. Compressive Strength fck in N/sqmm	Remarks
1	001	3.31	22.40	22.98	As per Cl. 6.2.2 of IS 456-2000, fcr=0.7√ fck
2	002	3.39	23.45		
3	003	3.36	23.10		

2. WATER ABSORPTION TEST

Sl No	Identification	Water absorption %	Average value %
1	001	4.59	4.64
2	002	4.71	
3	003	4.64	

AE-2
A.E.E

The result of the materials tested meets the standards and hence can be used for the work.
3rd Cross Rd RHS

AE-02

NEWZEN CONSULTANT * Bangalore *

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

Date: 08-01-2021

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Water absorption, %	**0.42 %**	Not more than 2.0 %
2.	Liquid Limit, %	**19.78**	Not more than 25.0 %
3.	Plasticity Index, %	**NP**	Not more than 6.0 %
4.	Moisture Content, %	**6.56**	----------
5.	Aggregate Impact Value, %	**28.35**	Not more than 40.00 %

The result of the materials tested meets the standards and hence can be used for the work.

Sample Collected Site : **1st Main Rd Vinayaka Layout**

AE-2

A.E.E

AE-02

NEWZEN CONSULTANT * Bangalore *

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

NC/QC/YD/2020-21/W2-SS-W3 Date: 18-01-2021

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.
{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

TEST RESULTS

1. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	97.45	95-100
26.50	---	-
22.40	72.10	60-80
11.20	56.70	40-60
4.75	34.15	25-40
2.36	23.65	15-30
0.600	19.35	8-22
0.075	3.20	0-5

AE-2

A.E.E

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : **5th Main Rd Vinayaka Layout**

AE-02

NEWZEN CONSULTANT * Bangalore *

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

NC/QC/YD/2020-21/W2-SS-W5 Date: 22-01-2021

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.
{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

TEST RESULTS

1. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	**100.00**	100
45.00	**98.20**	95-100
26.50	**---**	-
22.40	**71.45**	60-80
11.20	**56.80**	40-60
4.75	**31.05**	25-40
2.36	**24.55**	15-30
0.600	**19.15**	8-22
0.075	**4.05**	0-5

AE-2
A.E.E

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : **4th Main Rd(LHS) Vinayaka Layout**

AE-02

NEWZEN CONSULTANT * Bangalore *

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

NC/QC/YD/2020-21/W2-SS-DBM2 Date: 15-02-2021

1.TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.

{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}

Ref. Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

TEST RESULTS

A. Type of Construction : **Dense Graded Bituminous Macadam.**

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.53 %**

2. **Gradation Test**

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specfications-2013 DBM (Grading - 2)
37.5	100	100
26.5	98.45	90-100
19.0	84.15	71-95
13.20	71.60	56-80
4.75	47.10	38-54
2.36	33.80	28-42
0.300	18.25	7-21
0.075	6.15	2-8

AE-2
A.E.E

The result of the materials tested meets the standards and hence can be used for the work.

Sample Collected Site : **From Sri Ram Sahana Appartment**

AE-02

NEWZEN CONSULTANT * Bangalore *

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

NC/QC/YD/2020-21/W2-SS-DBM3 Date: 17-02-2021

1.TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.

{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

TEST RESULTS

A. Type of Construction : **Dense Graded Bituminous Macadam.**

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.52 %**

2. **Gradation Test**

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specfications-2013 DBM (Grading - 2)
37.5	100	100
26.5	97.15	90-100
19.0	81.25	71-95
13.20	73.40	56-80
4.75	43.90	38-54
2.36	34.65	28-42
0.300	17.20	7-21
0.075	5.40	2-8

AE-2
A.E.E

. The result of the materials tested meets the standards and hence can be used for the work.

Sample Collected Site : **From Sri Ram Sahana Appartment**

AE-02

Page No. 1/1

NEWZEN CONSULTANT * Bangalore *

NC/QC/YD/2020-21/W2-SS-DBM4 Date: 18-02-2021

1.TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for DBM mix sample.
{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

TEST RESULTS

A. Type of Construction : **Dense Graded Bituminous Macadam.**
1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **4.51 %**

2. **Gradation Test**
TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-10 of MORTH Specfications-2013 DBM (Grading - 2)
37.5	100	100
26.5	95.45	90-100
19.0	81.25	71-95
13.20	73.60	56-80
4.75	49.10	38-54
2.36	37.90	28-42
0.300	19.25	7-21
0.075	6.15	2-8

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : **2nd Main Rd(RHS) Vinayaka Layout**

AE-02

A.E.E

NEWZEN CONSULTANT Bangalore

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

NC/QC/YD/2020-21/W2-SS-DS5 Date: 18-02-2021

1.TEST REPORT ON BITUMINOUS MIXES :

(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for DBM mix sample.

{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}

Ref. Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

TEST RESULTS

Table 1: Properties of DBM (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Dense Bituminous Macadam, Grade-2 as per M.o.R.T&H (IV Revision)-2001 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	**1258**	900
2	Marshall Flow at 60°C, mm.	**3.44**	2.0 - 4.0

AE-2

A.E.E

The result of the materials tested meets the standards and hence can be used for the work.

Sample Collected Site : **From Sri Ram Sahana Appartment**

Page No. 1/1

AE-02

NEWZEN CONSULTANT * Bangalore *

NC/QC/YD/2020-21/W2-SS-BC1 Date: 19-02-2021

1.TEST REPORT ON BITUMINOUS MIXES :

(BITUMEN EXTRACTION TEST & GRADATION TEST)

Sub: To determine the percentage of bitumen and gradation for BC mix sample.
{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

TEST RESULTS

A. Type of Construction : **Bituminous Concrete**
1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **5.43 %**

2. **Gradation Test**
TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-17 of MORTH Specfications-2013 BC (Grading - 2)
19.0	100	100
13.2	98.25	90-100
9.5	83.10	70-88
4.75	75.50	53-71
2.36	50.25	42-58
1.18	42.35	34-48
0.600	35.80	26-38
0.300	23.60	18-28
0.150	18.25	12-20
0.075	7.15	4-10

AE-2
A.E.E
The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : **From Sri Ram Sahana Appartment.**

NEWZEN CONSULTANT * Bangalore *

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

NC/QC/YD/2020-21/W2-SS-BS3 **Date: 20-02-2021**

1.TEST REPORT ON BITUMINOUS MIXES :

(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for BC mix sample.

{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}

Ref.: Material testing/PMC/20-21,

Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

TEST RESULTS

Table 1: Properties of BC (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Bituminous Concrete, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	**1364**	900
2	Marshall Flow at 60°C, mm.	**3.48**	2.0 - 4.0

The result of the materials tested meets the standards and hence can be used for the work.

Sample Collected Site : **3rd Main Rd(RHS) Vinyaka Layout**

AE-2

A.E.E AE-02

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NC/QC/YD/2020-21/W2-SS-BS5 **Date: 22-02-2021**

1.TEST REPORT ON BITUMINOUS MIXES :
(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for BC mix sample.
{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

TEST RESULTS

Table 1: Properties of BC (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Bituminous Concrete, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	1364	900
2	Marshall Flow at 60°C, mm.	3.48	2.0 - 4.0

AE-2
A.E.E

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : **3rd Cross Rd Nagenahalli**

AE-02

NEWZEN CONSULTANT * Bangalore *

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NC/QC/YD/2020-21/W2-SS-BS6

Date: 23-02-2021

1.TEST REPORT ON BITUMINOUS MIXES :
(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for BC mix sample.
{Project*: Construction and Development of roads and Drains at Nagenahalli Layout, Vinayaka Layout , Balaji Layout Main and Cross roads and Surrounding areas in Ward no-02 of Yelahanka sub Division..}
Ref.: Material testing/PMC/20-21,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri Rajanna. N, Bangalore.

TEST RESULTS

Table 1: Properties of BC (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Bituminous Concrete, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	1352	900
2	Marshall Flow at 60°C, mm.	3.40	2.0 - 4.0

AE-2
A.E.E

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site : **5th Main Rd Vinayaka Layout**

AE-02

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